The Role of Aptitude in FLL (Foreign Language Learning) at University

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ABSTRACT

This paper explores the role of aptitude in foreign language learners (FLLs) in language courses in a university setting and how the relationship between aptitude and course scores might be affected by the students' motivation, anxiety and learning strategies. A small-case study was conducted in Universitat Autònoma de Barcelona (UAB) with a sample of 15 students (7 1st year students and 8 2nd year students) in the Degree in English Studies. Results show that aptitude does not seem to play a role in the course scores obtained by 1st year students due to the students' individual differences (i.e. motivation and anxiety), which act as mediating factors. However, aptitude seems to play a more significant role in 2nd year students, who apparently feel less anxious and more motivated and students' aptitude is generally correlated with course scores.

1. INTRODUCTION

A considerable amount of research has been carried out within the field of Second Language Acquisition (SLA) in relation to the study of Individual Differences (IDs) so as to identify the outstanding traits relevant to the mastery of an L2. Research supports the idea that IDs do have an influence on second language acquisition: "IDs have also been found to be consistent predictors of success in second language acquisition (SLA), yielding multiple correlations with language attainment in instructed settings" (Dörnyei, 2006: 42). More specifically, DeKeyser (2000) pointed out that aptitude scores are an important predictor of proficiency in acquisition contexts, although it has to be noted that "aptitude could be even more relevant in naturalistic than in instructed SLA, because of the greater amount of input that the learner has to process and the pressure to discover regularities and make generalizations merely from L2 exposure" (Granena, 2013: 180). Motivation, anxiety and learning strategies also play a crucial role in foreign language success and are clear mediating factors in the influence of aptitude on the process of foreign language learning.

The aim of this research paper is to explore the role of aptitude in foreign language learners (FLLs)' degree of success in language courses. The role of motivation, anxiety and learning strategies as meditating IDs will also be considered. A small-case study has been conducted in Universitat Autònoma de Barcelona (UAB) with a total of 16 students in their first (N=7) and second year (N=8) of their degree in English Studies. Participants will be tested on their foreign language aptitude and their aptitude scores will be correlated with the scores obtained in their language courses. Qualitative information on the participants' motivation, anxiety and learning strategies obtained by means of a questionnaire will be used to account for the results. The

information gained may help improve subsequent teaching methods taking into account individual factors by attempting to answer the following research questions:

(1) Is aptitude a good predictor of foreign language proficiency as measured in English language, grammar and phonetics and phonology courses?

(2) Do other individual variables, such as motivation, anxiety and learning strategies, elucidate the reasons why language aptitude scores might not be related to course scores?

This paper is organized as follows. Section 2 presents a review of the most relevant literature to this paper, with a focus on language aptitude and its main instruments of analysis. Section 3 addresses the methodology used in the current study and describes the context, participants, instruments, data collection procedures and data analysis. Section 4 reports on the results in relation to the two research questions. Section 5 deals with the discussion and interpretation of the results and Section 6 draws concluding remarks, identifies limitations of the study, considers the implications of the findings, and provides suggestions for future research.

2. BACKGROUND LITERATURE

2.1.Individual differences (IDs)

Individual differences (IDs) in language learning are referred to as "dimensions of enduring personal characteristics that are assumed to apply to everybody and on which people differ by degree. In other words, they concern stable and systematic deviations from a normative blueprint." (Dörnyei 2006: 42). The interest in learners' differences has evolved over the last few decades. The labels used to describe different kinds of learners have radically changed: "The terms *good* and *bad, intelligent and dull, motivated and unmotivated* have given way to a myriad of new terms such as

integratively and instrumentally motivated, anxious and comfortable, field independent and field sensitive, auditory and visual" (Horwitz, 2000, cited in Ellis, 2004: 525). Similarly, the perspective from which IDs are seen and the purpose of their study have also changed: "To this end, the main purpose of individual difference research was to *predict* which learners would succeed. (…) More recent research on motivation or on learning strategies, however, has sought to *explain* why some learners succeed more than others." (Ellis, 2004: 526). Since the 1970s, individual differences have been explored separately from mainstream SLA research and embodied in several articles.

The difficulty or ease of the path with which some learners have to cope so as to achieve the same learning outcomes has completely long bewildered FL teachers (Ganschow et al., 1994). There is great amount of variation among learners' success while learning a language in terms of rate of acquisition and in their achievement of native-like competence. While some students may put a great effort throughout the learning process, others achieve a high level of L2 with relative ease (Borodkin and Faust, 2014).

2.1.1. Classification of IDs

Since Carroll and Sapon's work on aptitude (1959), many learner variables account for individual differences in language learning. These attributes have been grouped, according to Ellis (2006) and Lightbown and Spada (2006), into different categories:

(1) Abilities: Intelligence, language aptitude and memory.

(2) Propensities: learning style, motivation, anxiety, personality and willingness to communicate.

(3) Learner cognitions about L2 learning: learner beliefs.

(4) Learner actions: learning strategies.

As Lightbown and Spada (2006) point out, social factors such as identity and ethnic group affiliation, have an effect upon the above categories. Hence, age and social factors do not belong to a classification as such but they rather have an effect upon the other individual variables. A brief overview of motivation, anxiety and learning strategies is first presented followed by a more in-depth review of aptitude and relevant previous research.

2.1.1.1. Motivation

Motivation is a primary affective variable and it usually refers to the amount of effort, enjoyment and personal investment people employ on L2 learning, (Ortega, 2009). Several studies have shown that motivation is dynamic and it keeps changing and evolving throughout the learning process (Ellis, 2004). The questions *why*, *how long* and *how hard* perfectly fit with the description of motivation since "Motivation concerns the direction and magnitude of human behavior, or, more specifically (i) the choice of a particular action, (ii) the persistence with it, and (iii) the effort expended on it" (Dörnyei and Skehan, 2003: 614).

According to Gardner and Lambert's work (1985), three major dimensions of motivation were distinguished: "integrativeness", which accounts for a wish to understand and form part of the target language culture, and "instrumentality", which consists of a functional need, such as getting a job and "attitudes" towards the L2. During the mid-1990s a distance from the emphasis on *quantity* to a deeper exploration on the *quality* of motivation arose. In the Self-Determination Theory (Deci and Ryan, 1985) two different types of motivation can be distinguished: *intrinsic*, which refers to an inherent motivation that seeks learning and *extrinsic*, which is said to be externally imposed and impelled into action (Ortega, 2009). More recently, Dörnyei (2005, 2009)

developed the L2 Motivational Systemwhich is made up of the following three dimensions:

(1) The *Ideal L2 Self*, which represents the type of L2 learner one desires to be.

(2) The *ought-to L2 Self*, which refers to the specific abilities one should hold for external purposes.

(3) The *L2 Learning Experience*, which concerns learners' attitudes towards the language learning process and which can be influenced by situation-specific causes.

Research suggests that the correlation between scores on motivation and measurements of achievement in SLA is positive. More specifically, integrative motivation promotes success in SLA, as has been observed in many studies (Gardner, Tremblay, & Masgoret, 1997; Masgoret and Gardner, 2003, among others).

2.1.1.2. Learner anxiety

Learner anxiety refers to the stress and even worry that some students suffer from throughout the learning process (Lightbown and Spada, 2006). Anxiety and L2 proficiency are undoubtedly related but causal direction between the two still has to be determined (MacIntyre, 2002). Spielman and Radnofsky's (2001) ethnographic study showed that there are two types of anxiety: "euphoric/non-euphoric", which consists of stressful events that are viewed as positive and "dysphoric/non-dysphoric", whose events can be viewed negatively on performance. As Lightbown and Spada (2006) also point out, there is a positive aspect about anxiety that can be helpful pedagogically. For example, before an oral presentation, it might not be that detrimental to experience anxiety since it can provide focus and thus success. The most well-known measure of anxiety is the Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz et al,

1986), which has been vastly used to examine to relationship between anxiety and (poor) L2 performance.

Research suggests that scores on anxiety scales are generally related to course grades and more specifically, students with high levels of anxiety generally receive lower grades in their foreign language courses than students with lower anxiety levels (Granena, 2009).

2.1.1.3. Learning strategies

According to Oxford (2003), learning strategies are the tools or techniques learners use consciously to facilitate their learning process. The first studies of L2 learning strategies did not emerge until the mid-1970s. The aim of the most well-known group of researchers (Naiman et al., 1978) was to understand the factors that help people achieve a good, or not so good, mastery of an L2. A case-study conducted by Chamot (1990) proposed a classification of learning strategies: cognitive, metacognitive and social-affective strategies. Oxford (1990), who based his work on the Strategy Inventory for Language Learning (SILL), came up with a different classification:

(1) Affective strategies: identifying one's mood and anxiety, e.g.: encouraging and rewarding oneself.

(2) Social strategies: asking for clarification, e.g.: using the L2 with native people.

(3) Metacognitive strategies: identifying one's own style learning preferences, e.g.: arranging a schedule, gathering and organizing materials, etc.

(4) Cognitive strategies: manipulating the material in direct ways, e.g.: guessing from context.

(5) Memory-related strategies: learning or retrieving lexical items or structures via sounds, images, etc.

(6) Compensatory strategies: guessing from the context in listening and reading, using synonyms, etc.

Learning strategies have been studied as a source of L2 success. Research has shown evidence that learning strategies can be used as a training tool for language learners since they contribute to success in the L2 (Dörnyei and Skehan, 2003).

2.2.Foreign Language Aptitude

The most relevant ID in the present study is foreign language aptitude, which is generally defined as a capacity or cognitive ability that enables humans to master a foreign language (Carroll, 1993, cited in Skehan, 2012; Dörnyei, 2005).

The meaning of aptitude has had different meanings within the SLA field. First, aptitude was thought to be made up of different personal traits that dealt with the learning process (Snow, 1992, cited in Kormos, 2013). In a more recent study, Robinson (2005) pointed out that aptitude is a synthesis of both cognitive abilities and performance at different stages.

The cognitive psychologist Carroll (1962) realized that language learning aptitude was not a unitary ability, but rather a conglomerate of at least four relatively independent abilities (Carroll, 1991):

1. *Phonemic coding ability* – an ability to identify different sounds, and to form correlations between them and their respective picture stimuli.
2. *Grammatical sensitivity* – the ability to distinguish the grammatical function of words in sentence structures.
3. *Associative memory* – the ability to assimilate associations between sounds and to retain them.
4. *Inductive language learning ability* – which is the capacity to infer or induce the rules from diverse language materials.

Some decades after, Skehan (1998) adopted Carroll's classification and created another model (1998), proposing that the components of language aptitude are related to the stages of information processing, or in other words, that "modularity in the L2 case is based on three modules, each of them connected to an aptitude component" (Skehan, 2002: 82), which is briefly explained below.

a. *Auditory processing*: converting acoustic input into what might be termed processable input, connected to the phonemic coding ability.
b. *Language processing*: or central processing, which is connected to Carroll's grammatical sensitivity and inductive language learning ability, is the capacity to infer rules of language and make linguistic generalizations.
c. *Memory*: or output, which is connected to the functioning of memory, is concerned with acquisition of new information, with retrieval, and with the way the elements are stored.

The very first instrument that was ever created to measure aptitude was created by Carroll (1959). After much research in the area of foreign language aptitude, he created the *Modern Language Aptitude Test* (MLAT) together with Sapon. They set up this test by devising predictor tests of foreign language learning. These tests comprehended five sub-tests, respectively: *Number Learning, Phonetic Script, Hidden Words, Words in Sentences* and *Paired Associates*, which were generally related to the four components of language aptitude outlined above.

Although the MLAT is the most influential aptitude battery test, other aptitude measurement tests were created, such as the *Language Aptitude Battery* (PLAB) (Pimsleur, 1966) or the CANAL-F test (Cognitive Ability for Novelty in Acquisition of Language-Foreign) (Grigorenko, Sternberg and Ehrman, 2000).

A recent development is the LLAMA aptitude test (Meara, 2005). The LLAMA test was created by students of English Language and Linguistics at the University of Wales, Swansea (Granena, 2013). It is a free computer-based aptitude test (http://www.lognostics.co.uk/tools/llama/), which is based on an adapted British-Columbian indigenous language and a Central-American language since "it facilitates test administration to speakers of any L1 without the need for translations that may threaten the validity and reliability of the test" (Granena, 2013: 107). The testing phases are not timed and the score range is between 0 and 100. It includes a set of four sub-tests, loosely based on Carroll's (1991) taxonomy of sub-components: LLAMA B, a vocabulary learning task, LLAMA D, a test of phonetic memory, LLAMA E, a test of sound-symbol correspondence, and LLAMA F, a test of grammatical inferencing.

2.3.Previous research on Foreign Language Aptitude

A considerable number of research studies have been devoted to the study of language aptitude (Harley and Hart, 1997; Ranta, 2002; Kiss and Nikolov, 2005; Erlam, 2005; Sáfár and Kormos, 2008; Granena, 2014, among others). Some of the central studies on this area will be provided below.

Harley and Hart (1997) conducted an empirical study of 65 11th grade students in a French immersion program, who were divided into two groups. One of the groups began an early immersion program in grade 1 and the other one in a late immersion program as adolescents in grade 7. Both groups were administered the same three tests that included associative memory, memory for text, related to Skehan's (1998) memory ability, and analytical ability. The dimensions of L2 knowledge and use that test-takers were assessed on were obtained by means of a vocabulary recognition task, a listening comprehension task, a cloze test, a written production task and finally an individual oral test. The findings obtained in the earlier immersion group yielded significant

correlations between the memory-oriented aptitude scores and general achievement. For the late immersion students, analytical language analysis was the only predictor of L2 proficiency scores. Some tests of L2 proficiency were not significantly related with any of the aptitude measures used.

Kiss and Nikolov (2005) aimed to develop an aptitude test for young learners. This study focused on how aptitude scores relate to learners' performances on a proficiency measure, motivation, age and grades in English by means of a study conducted by 419 sixth graders studying in 26 groups in 10 different primary schools in Hungary. Data were collected on English proficiency tests, the aptitude test and on learners' motivation. Results showed that a strong relationship was found between participants' scores on the aptitude test and the English language proficiency test, which proved to be the best predictor of outcomes, followed by motivation with more moderate correlations. Moreover, the relationship between aptitude, grades and school subjects showed that learners with better results tended to score higher on the aptitude measures than lower performers.

Granena (2014) explored the role aptitude played in ultimate morphosyntactic attainment with a group of early Chinese L1-Spanish L2 sequential bilinguals with an age onset of between 3 and 6 years old: 24 of the learners started learning the L2 at age 3, 5 started at age 4, 11 at age 5, and 10 of them started at age 6. They were administered a speeded-response and a non-speeded-response auditory GJT. In the speeded-response test testees had to indicate whether the sentences where grammatical or ungrammatical by pressing a response button. The non-speeded-response test presented test-takers with different sentences and they had to indicate whether they were grammatical or ungrammatical. The LLAMA test battery was also administered to the testees. The findings showed that aptitude was relevant and related to early learners'

attainment on a non-speeded-response auditory GJT, particularly in structures involving grammatical agreement, for which age effects were the strongest.

Some other researchers have examined aptitude in depth, but focusing on other dimensions such as its role in different instructional approaches. Erlam (2005) conducted a study in a secondary school in New Zealand so as to determine the relationship between the effectiveness of three instructional methods and aptitude. A total of 92 students were assigned to three different instructional groups (i.e., inductive instruction group, deductive instruction group and structured input instruction group, which students received explicit rule explanation about direct object pronouns and then they practiced it with some input-based activities (i.e. consciousness raising activities where learners had to identify errors in both written and spoken input). Feedback was then given to students. These three groups were assessed according to Skehan's (1998) three components (i.e., phonemic coding ability, language analytic ability and working memory) and on measures of reading and listening comprehension, written and oral production over three different tests (i.e., pre/post/delayed post-test). The target structure was direct object pronouns in L2 French. Results indicated that deductive instruction minimizes any effect that individual differences and language aptitude may have regarding instructional outcomes. Results also suggested that the inductive group made greater gains than the students of the other two groups. However, the results show that differences in individuals' profit did not correlate with differences in language aptitude. Hence, inductive instruction tends to benefit all language learners.

Sáfár and Kormos (2008) investigated the relationship between aptitude, working memory, success of focus-on-form in instructed learning environments and short-term memory in the process of language learning. The participants were 40 students from an English-Hungarian bilingual secondary school and 21 students from a

regular Hungarian secondary school, who took part in an intensive language training programme. Language aptitude was assessed both at the beginning and at the end of the academic year. Test-takers were administered the Hungarian Language Aptitude Test (HUNLAT) and results showed that for students who were instructed using communicative methods combined with focus-on-form, language aptitude had modest power in predicting success in language learning. The correlations between working memory capacity and language proficiency reveal that "working memory is indeed a key underlying cognitive variable affecting both language aptitude and language learning success" (Sáfár and Kormos, 2008: 131). The results also showed that working memory and deductive skills are abilities of primary importance and aptitude plays a second role since the correlations between language aptitude, working memory and the different components of language proficiency show that students need to pay attention to different abilities when acquiring distinct foreign language skills.

Generally speaking, the literature is consistent in finding aptitude a strong predictor of proficiency in FLL, although in some contexts aptitude plays a second role, implying that other individual differences have to be taken into account. What is more, the different teaching methods should be paid careful attention to so as to ensure better outcomes.

3. METHOD

3.1.Participants

The present study was conducted in Universitat Autònoma de Barcelona (UAB). The sample consisted of a total of 15 students in their first (N= 7) and second year (N=8) of their degree in English Studies, who took part on this study on a voluntary basis and having signed a consent form (see Appendix A). The age of the participants

ranged between 18 and 23. Most students were Spanish and Catalan bilinguals, even though Romanian, Arab, and Berber were present among some participants' L1s. They had been learning English since they were approximately 6 years old, but there were considerable differences in their previous hours of instruction and the quality of their learning experiences before university.

3.2.Instruments

3.2.1. Background questionnaire

A biodata questionnaire was developed including questions on their age, their mother's father's first language and their own native language, the years of instruction of EFL at school, high-school and university, the years of instruction of EFL as an extra-curricular activity and whether they had stayed in an English-speaking country (see Appendix B).

3.2.2. LLAMA test

To measure aptitude the LLAMA test (Meara, 2005) (see Appendix C) was administered to the participants, who had to perform all the four parts of the battery test. As outlined in Section 2, the LLAMA Test consists of four subtests that generally correspond to the traditional four components of foreign language aptitude (Carroll, 1991). LLAMA B (Vocabulary learning) is a test that measures the ability to learn new vocabulary in a pre-determined space of time of two minutes. There are 20 words to be memorized, which are presented visually and that correspond to target images. The testees have to click on each image and try to learn as many words as possible by associating them with the appropriate words. LLAMA D (Sound recognition) is described as a new task that does not appear in the work of Carroll and Sapon (1959) and that measures the ability to recognize new patterns in spoken language (Granena,

2013). This test is designed to examine whether testees can recognize short utterances of spoken language that test-takers had been previously exposed to. The test-takers complete a recognition test, whose sound sequences are only played once. They have to discriminate between familiar sounds and new items. LLAMA E (Sound-symbol correspondence) measures the ability to form sound-symbol associations between 24 recorded syllables and a written representation of those sound in an unfamiliar spelling system. Test-takers have to click on the different symbols and try to learn the corresponding sound situation in a default time of two minutes. They then hear two-syllable words and have to decide which their symbol correspondence is. Finally, LLAMA F (grammatical inferencing) measures the ability to infer or induce the rules of an unknown language. Testees have to work out the grammatical rules in a five-minute period by clicking on each of the 20 small buttons, which represent a picture and a sentence describing the picture displayed. In the testing phase, a picture and two sentences are shown, namely one grammatical and one ungrammatical sentence. Test takers have to click on the correct option.

3.2.3. IDs questionnaire

Participants were asked to fill an online questionnaire (see Appendix D), which gathered information about their language learning motivation, anxiety and learning strategies. The questionnaire consisted of 11 items: 6 (5-point) Lickert-type scale statements, 4 open questions with several options to choose from and an alternative option students could choose to answer openly and 1 open question. Six items reflected the students' motivation related to the learning situation, two items reflected aspects of their language learning anxiety and the remaining three reflected how they saw themselves and their learning strategies.

3.3.Procedures

Data collection was divided into two main phases, the first of which comprised the LLAMA test and the biodata questionnaire, and a second data collection phase, which consisted in the online questionnaire. Each testing session was supervised both by the author of this paper and by the tutor, who made every effort to ensure the reliability of the results. At the beginning of the LLAMA aptitude testing session each task was explained to the participants, and re-explained individually if necessary. The biodata questionnaires were completed at the end session of the LLAMA aptitude test, under the supervision of the author and the tutor. In the case of the online questionnaire, students completed the tests virtually without any problem.

3.4.Data analysis

Results from the LLAMA test were transcribed and coded in an Excel sheet and further submitted to correlational analyses with the students' course grades. To begin with, first and second year students were divided into two blocks. For each of the blocks, LLAMA general results and LLAMA subtest results were correlated with the different course grades. LLAMA B results were correlated with Use of English scores, LLAMA D and E with Phonetics scores and LLAMA F with Grammar scores. All scores were converted to /10 scores to allow for comparison.

Data from the biodata questionnaire and the online questionnaire were transcribed and analyzed so as to account for the results obtained from the correlational analyses. In scoring the questionnaire responses, negatively worded items, such as anxiety, were reversed so that the responses could consistently range from 1 (the most negative score) to 5 (the most positive score) throughout the questionnaire. Scores were converted to /10 for comparison reasons.

4. RESULTS

4.1.Descriptive statistics for aptitude and course scores

Table 1 displays the descriptive statistics for the mean LLAMA test scores, the different LLAMA subtest scores and the course scores, namely *Use of English*, *Phonetics* (only for 2nd year students) and *Grammar*. The results are rather uniform and there is not great variability among individual scores, except in LLAMA E (1st year) and LLAMA F (2nd year) as well as in Anxiety. First and second year students show very similar results regarding the general mean LLAMA results. However, results from LLAMA B and LLAMA F display important differences in favour of first year participants. As for course scores, similar results were gathered from the two groups of students.

	1st year students	2nd year students
LLAMA (mean)	5.59	4.34
Standard Deviation	1.56	1.10
LLAMA B	6.57	3.31
Standard Deviation	2.35	1.57
LLAMA D	2.78	2.43
Standard Deviation	1.40	0.82
LLAMA E	7.71	7.87
Standard Deviation	2.75	1.95
LLAMA F	5.28	3.75
Standard Deviation	1.38	2.65
Use of English	6.98	6.7
Standard Deviation	1.61	1.04

Grammar	5.9	6.56
Standard Deviation	1.88	1.12
Phonetics		7.65
Standard Deviation		0.93

Table 1. Llama test and course scores

Figure 1 provides a visual representation of the descriptive results obtained from both the LLAMA aptitude and course tests.

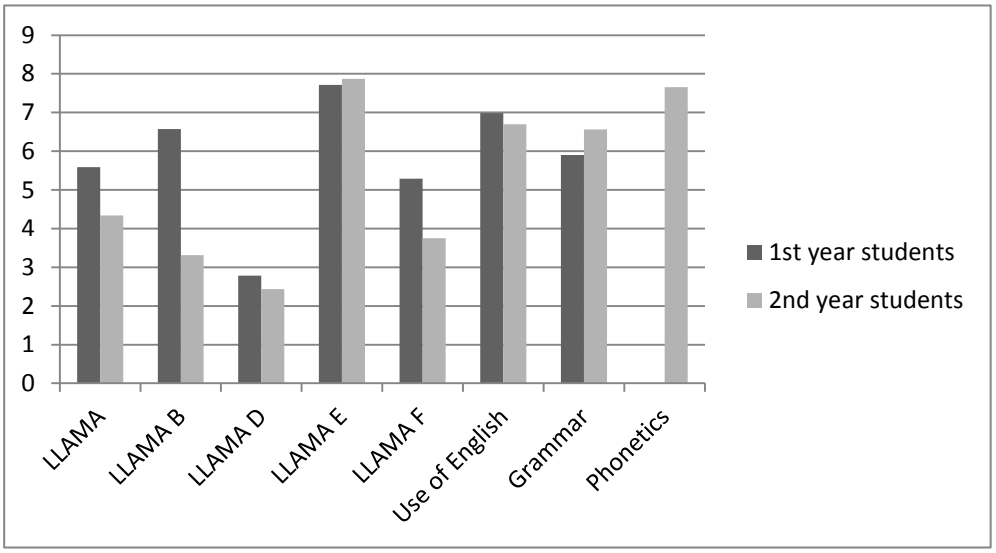

Figure 1. Visual representation of the 1st and 2nd year's aptitude and course scores

As for the quantitative analysis of motivation and anxiety scores, Table 2 shows that 2nd year students were more motivated and less anxious than 1st year students.

	Motivation	**Standard Deviation**	**Anxiety**	**Standard Deviation**
1st year	6.42	1.27	6.42	1.98
2nd year	7.18	1.46	5.37	2.19

Table 2. IDs (motivation and anxiety)

4.2. Correlations

A Pearson product-moment correlation coefficient was computed to assess the relationship between, on the one hand, the LLAMA mean score and course scores, and on the other hand, the LLAMA subtests and course scores. As can be seen in Table 3, for 1st year students, the relationship between course scores and its correspondent LLAMA mean is non-existent except for the correlation between LLAMA B and the scores obtained in Use of English, which is negative and moderate (r = -.54) and the correlation between Grammar and LLAMA F, which is weak (r = .30)

	Use of English	**Grammar**
LLAMA	-.04	-.05
LLAMA B	-.54	
LLAMA F		.30

Table 3. 1st year correlations

For 2nd year students, the LLAMA mean score shows a moderate positive correlation (r = .53) with Use of English and a weak correlation with Grammar (r = .27) and Phonetics (r= .22). LLAMA B and Use of English have a weak correlation (r= .31) and LLAMA D+E shows a moderate positive correlation with the Phonetics course scores (r= .43). Finally, LLAMA F and Grammar scores show a negative weak correlation (r= -.24).

	Use of English	**Grammar**	**Phonetics**
LLAMA	.53	.27	.22
LLAMA B	.31		
LLAMA D + E			.43
LLAMA F		-.24	

Table 4. 2nd year correlations

Figure 2 is intended to show a visual representation of the 1st and 2nd year correlations of aptitude and course scores and hence, have a better overview.

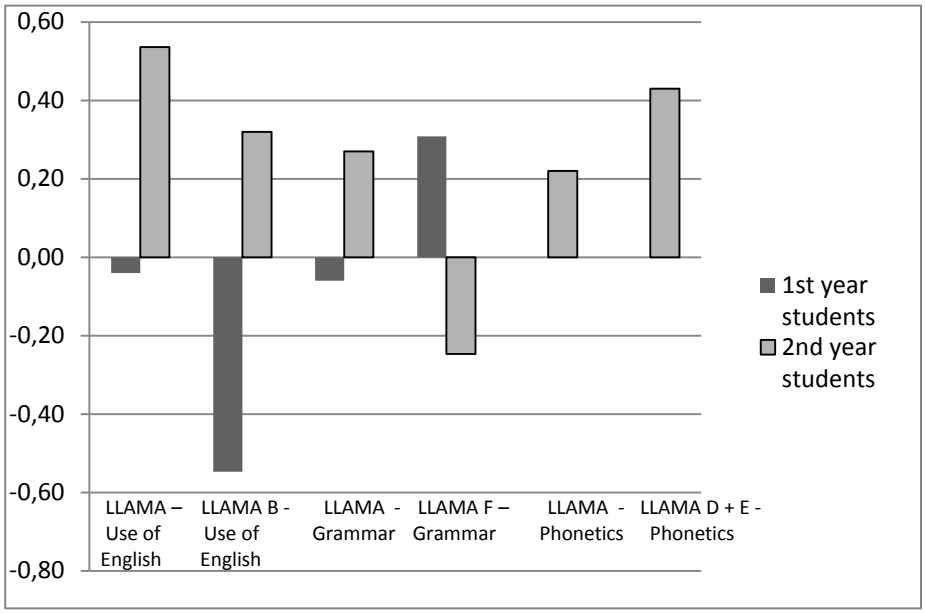

Figure 2. Visual representation of the 1st and 2nd year correlations of aptitude and course scores

Figure 7 shows 1st and 2nd year individual students' motivation and anxiety scores. A relationship between motivation and anxiety can be observed. Although the cause-effect relation between them cannot be stated, there is a moderate correlation between 1st year's motivation and anxiety (r = .57) and a weak one in 2nd year students (r = .39).

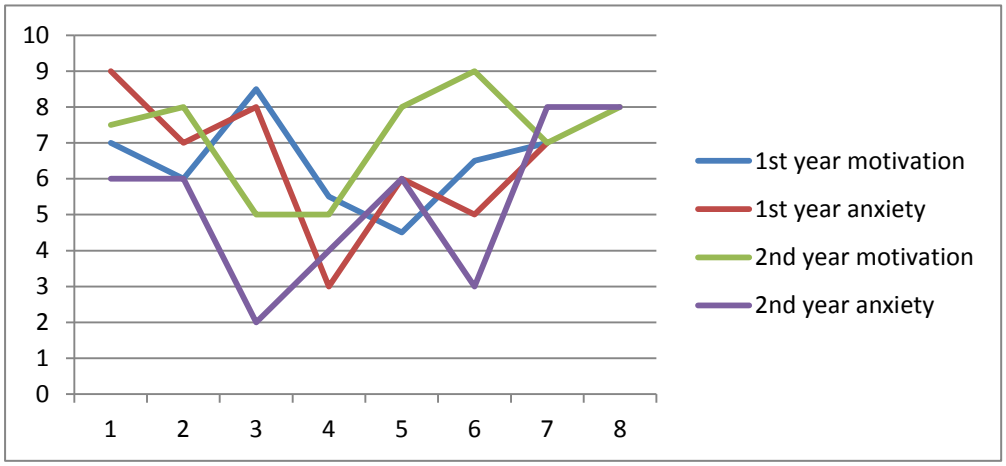

Figure 3. Motivation and anxiety in 1st and 2nd year

4.3.Qualitative data on motivation, anxiety and learning strategies

Qualitative data with regard to motivation and anxiety were also collected in the questionnaire to gain more in-depth information about the learners' individual characteristics influencing their university scores and in order to explain the role of language aptitude in the students' performance on the LLAMA aptitude test and university scores.

In regard to first year's motivation, most participants seem to have chosen this degree because they "like languages" and two people chose it because they "did not know what else to do", which might be indicative of a certain degree of demotivation. Students were also asked about whether they liked *Usos Bàsics*. Nearly half of the participants seemed not to like it at all, which is a factor to be taken into account while discussing the results, half of them seemed not to care and only one reported liking the subject. However, most participants agreed that they had learned something in this subject. The majority of the participants reported getting extremely anxious when giving an oral presentation but only a few seem to get anxious when interacting with peers in group-work. Regarding learning strategies, half of the participants like memorizing and summarizing when studying and the other half preferred other methods: only two of them reported making a study plan, two others reported they liked learning with other people and one person preferred to understand what she was studying. In relation to the kind of activities they carry out to improve their English, students mentioned reading books and articles and watching TV series in English or practicing with language exercises.

Half of the 2nd year students chose this degree because they "like languages", three students chose it because they wanted to become teachers and one person because he "did not know what else to do". In relation to anxiety, the majority of the students

reported being anxious, like 1st year students and others did not get anxious at all. Only a few admitted being somewhat anxious when interacting with peers. While studying, half of the participants agreed they preferred summarizing and memorizing. Others, stated that they liked learning with other people, making a study plan and understanding the concepts they are studying. In relation to the kind of activities they carry out to improve their English, students mentioned reading books and articles and watching TV series in English or practicing with language exercises.

5. DISCUSSION

After having presented the results, the research questions of this study can be carefully answered.

First, this study set out to investigate whether aptitude was a good predictor of course scores obtained in English language (*Usos Bàsics*), grammar and phonetics and phonology courses. Taking into account the correlations generated, although it could be argued that there is a non-existent correspondence between 1st year students' aptitude and course scores, the fact is that there is a weak correlation between LLAMA F and Grammar (r = .30) and a negative and moderate correlation between LLAMA B and Use of English (r= -.54). Aptitude seems to have a greater role in 2nd year students' course scores. In 2nd year students, the LLAMA mean score shows a moderate correlation (r= .53) with Use of English and a weak correlation with Grammar (r= .27) and Phonetics (r= .22). LLAMA B and Use of English are weakly correlated (r= .31) and LLAMA D+E shows a moderate correlation with Phonetics course scores (r= .43). Finally, LLAMA F and Grammar scores show a negative weak correlation (r= -.24). These results show that aptitude is related to course scores in 2nd year students.

Data on motivation and anxiety shows that 2nd year students were more motivated and less anxious than 1st year students, who suffered more from anxiety and

were quite demotivated. Anxiety and lack of motivation in 1st year students seem to be much more determinant factors in the course scores obtained. Any effects that aptitude might have seem to be hidden by the effect of anxiety and lack of motivation. Once students are in their 2nd year and have adapted to the degree, aptitude starts to play a role. Second year students seem to be less anxious since they have already passed this subject and have been through this process of constant agony and the pressure starts disappearing, letting students increase their marks.

Qualitative data analysis gathered through student questionnaires provided further support for the better understanding of the first research question. Most of the students seemed not to like *Usos Bàsics*, whether because they are demotivated or not confident enough. Moreover, it is important to point out that the "did not know what else to do" statement shows a great demotivation before even starting the degree, but that only includes a minority of the students. Regarding anxiety, the fact that the majority of the participants reported getting extremely anxious when giving an oral presentation is quite a common fear among students. This fear could be born out of this insecurity due to their low level of proficiency in English, and hence, increased throughout the academic year.

From these findings it can be interpreted that the role of aptitude has different dimensions in 1st and 2nd year students when correlating it with course scores. The reason why that is so could be elucidated by the relevant role the other IDs play.

In order to gain insights into the present findings, they should be compared with studies examining aptitude in instructed learning environments. One such study is Sáfár and Kormos (2008), who stated that aptitude scores were found to be correlated with Use of English scores, among others. Kiss and Nikolov (2005) also pointed out that there is a relationship between aptitude, grades in English and other school subjects,

which revealed that learners with better school results tend to score higher on the aptitude measure than lower performers. Moreover, the results showed that memory is of primary importance and that aptitude plays a second role since the correlations between aptitude, memory and proficiency show that students need to pay attention to different abilities when acquiring different foreign language skills.

6. CONCLUSION

This study set out to investigate the relationship between, on the one hand, aptitude and course scores and, on the other hand, between aptitude and other IDs (motivation, anxiety and learning strategies). In sum, it could be stated that these results acknowledge that aptitude does not seem to play a role in the course scores obtained by1st year university students due to other mediating factors, namely motivation, anxiety and learning strategies. However, aptitude seems to have a more significant role in 2nd year students. Therefore, this study is shallowly in line with other previous studies that confirm the correlation between aptitude and course scores, taking into account other IDs as important factors in 1st year students.

6.1.Limitations

One of the very first and obvious limitations of this study is the sample, which is taken from a specific university. This university could be representative of some other universities of Catalonia, but not of all of them due to the different subjects and levels of the participants. The number of participants is also limited and hence, generalizations of the results cannot be made. Participants agreed to participate on a voluntary basis so probably they were quite a motivated group. Regarding the questionnaire's content, the statements are quite general and motivation should be more specific focusing on each subject and then IDs could be more easily related with course scores. Also, it would be

very important to gain more insights into the role of memory in relation to aptitude since it was not addressed in this study and it could have been of significance while performing the LLAMA aptitude test.

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APPENDIX A

Consent Form

Universitat Autònoma de Barcelona

Consent Form

TFG – EFL Aptitude, Proficiency and Motivation

I agree to take part in a research study investigating EFL (English as a Foreign Language) aptitude, proficiency and motivation.

I understand that my name and the results obtained from the tests and questionnaires will remain confidential and that I will not be identified in any report or presentation which may arise from the study.

I understand that while I may not benefit directly from the study, the information gained may help achieve a better understanding of the specific reasons why some students tend not to get the expected results with respect to their aptitude scores and may also help improving subsequent teaching methods taking into account individual factors.

I understand what this study involves and I hereby give permission for my tests to be used for research purposes.

_____	_____	_____
Name	Signature	Date

APPENDIX B

Background questionnaire

Universitat Autònoma de Barcelona

Learner profile
TFG – EFL Aptitude, Proficiency and Motivation

Student's code (to be filled in by the researcher):

Aptitude test (to be filled in by the researcher):

Llama B:
Llama D:
Llama E:
Llama F:

1. Name and surname:

2. Date of birth:

3. Age:

4. Personal email:

5. Native language(s):

6. Mother's mother tongue:

7. Father's mother tongue:

8. Language(s) spoken at home (if more than one please give the average % of each):

9. Years of instruction (and hours per week) of English as a Foreign Language at school/high school/university:

3. At school:

4. High-school:

5. University (only if you are repeating Usos Bàsics):

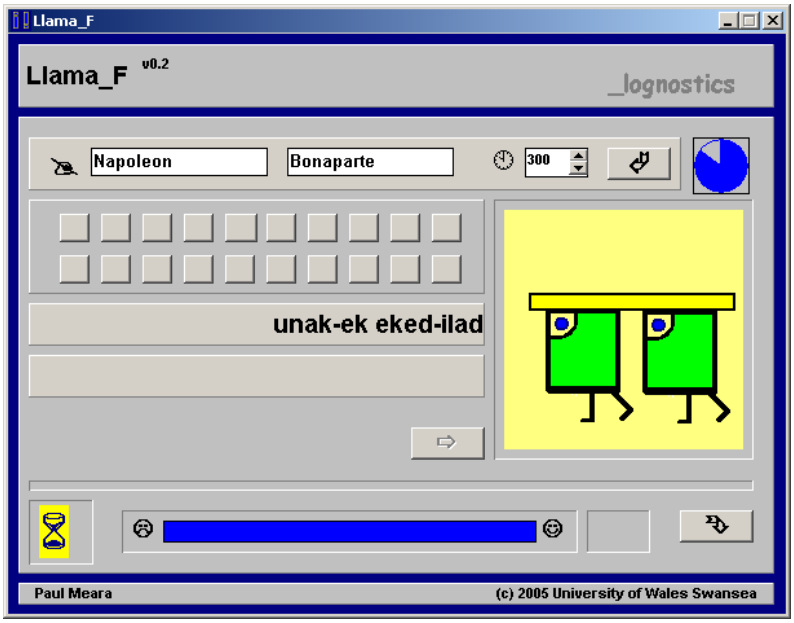
10. Years of instruction of English as a Foreign Language (and hours per week) as an extra-curricular activity:

11. Stay in an English-speaking country: Yes No

(5) Where?
(6) When?
(7) How long?

APPENDIX C

LLAMA Aptitude Test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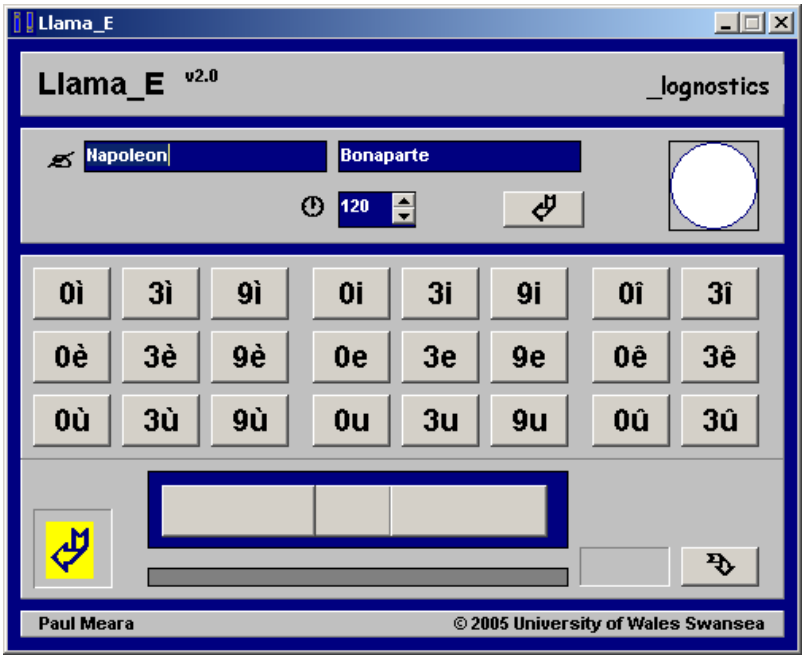
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Paul Meara
© 2005 University of Wales Swansea

APPENDIX D

Online Questionnaire

TFG

Aptitude and IDs

Date

Name and surnames (obligatory)

Why did you decide to do this degree?

If you selected "another option", please specify here:

What is it you like most about this degree?

Do you like Usos Bàsics?

(Only if you are doing it now)

	1	2	3	4	5	
Disagree	○	○	○	○	○	Fully agree

Do you feel that you are learning with Usos Bàsics?

1 (Disagree) - 5 (Fully agree)

	1	2	3	4	5	
Disagree	○	○	○	○	○	Fully agree

How do you study?

Learning habits (you may click more than one)

- ☐ I memorise
- ☐ I summarise
- ☐ I learn with other people
- ☐ I make a study plan
- ☐ Another option

If you selected "another option", please specify here:

When do you study?

- ○ I study the previous night
- ○ I study the week before
- ○ I study many weeks before
- ○ Another option

If you selected "another option", please specify here:

What are you going to do after you finish your degree?

- ○ Continue studying
- ○ Find a job
- ○ Sabbatical year
- ○ Another option

If you selected "another option", please specify here:

How proficient would you say you are in English?

1 (not very) - 5 (very)

1 2 3 4 5

I become anxious when giving an oral presentation in English

1 (FULLY AGREE) - 5 (DISAGREE)

1 2 3 4 5

I become anxious when interacting with peers in group-work

1 (FULLY AGREE) - 5 (DISAGREE)

1 2 3 4 5

I like my teachers

1 (disagree) - 5 (fully agree)

1 2 3 4 5